

AMENDMENTS TO THE CLAIMS

Claims 1-2 (Canceled)

Claim 3 (Currently Amended) A hydraulic lash adjuster for an internal combustion engine including a cylinder head and a rocker arm, the hydraulic lash adjuster comprising:

a bottomed cylinder fixed to the cylinder head;

a plunger having a bottom wall and an upper end supporting the rocker arm, the plunger being vertically movable while being brought into sliding contact with an inner circumferential face of the cylinder;

a low-pressure chamber defined in the plunger and filled with a hydraulic fluid;

a high-pressure chamber defined in a lower interior of the cylinder and partitioned by the bottom wall of the plunger from the low-pressure chamber, the high-pressure chamber being filled with the hydraulic fluid;

a valve port formed through the bottom wall of the plunger so as to communicate with the low-pressure chamber and the high-pressure chamber, the valve port having at the high-pressure chamber side an opening edge formed with a valve seat face; and

a valve element provided in the high-pressure chamber so as to abut and depart from the valve seat face, thereby closing and opening the valve port,

wherein the valve element is made of a ceramic containing silicon nitride,

wherein the valve element is biased in a closing direction by a spring element, and

wherein the valve seat face is a convex and arcuate face.

Claims 4-7 (Canceled)

Claim 8 (New) The hydraulic lash adjuster according to claim 3, wherein the ceramic containing silicon nitride has a hardness value of at least 1500 [HV].

Claim 9 (New) The hydraulic lash adjuster according to claim 3, wherein the ceramic containing silicon nitride has a heat resistant temperature of at least 800 °C.

Claim 10 (New) The hydraulic lash adjuster according to claim 3, wherein the spring element comprises:

- a first spring element biasing the valve element in the closing direction, and
- a second spring element biasing the plunger outward.

Claim 11 (New) A hydraulic lash adjuster for an internal combustion engine including a cylinder head and a rocker arm, the hydraulic lash adjuster comprising:

- a bottomed cylinder fixed to the cylinder head;
 - a plunger having a bottom wall and an upper end supporting the rocker arm, the plunger being vertically movable while being brought into sliding contact with an inner circumferential face of the cylinder;
 - a low-pressure chamber defined in the plunger and filled with a hydraulic fluid;
 - a high-pressure chamber defined in a lower interior of the cylinder and partitioned by the bottom wall of the plunger from the low-pressure chamber, the high-pressure chamber being filled with the hydraulic fluid;
 - a valve port formed through the bottom wall of the plunger so as to communicate with the low-pressure chamber and the high-pressure chamber, the valve port having at the high-pressure chamber side an opening edge formed with a valve seat face;
 - a valve element provided in the high-pressure chamber so as to abut and depart from the valve seat face, thereby closing and opening the valve port; and
 - a spring element comprising:
 - a first spring element biasing the valve element in a closing direction, and
 - a second spring element biasing the plunger outward;
 - wherein the valve seat face is a convex and arcuate face;
 - wherein the valve element is made of a ceramic containing silicon nitride;
 - wherein the ceramic containing silicon nitride has a hardness value of at least 1500 [HV];
- and
- wherein the ceramic containing silicon nitride has a heat resistant temperature of at least 800 °C.